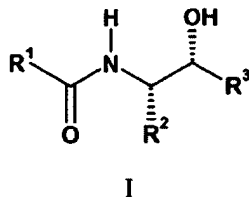


# Amendments to the Claims

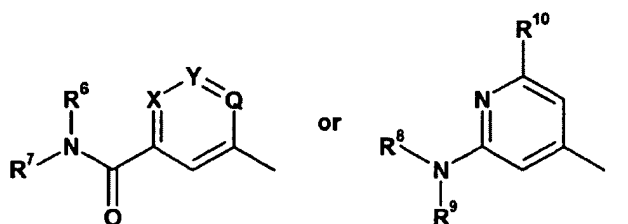
We Claim:

1. (Currently amended) A compound of Formula I:



where:

$R^1$  is  $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_1-C_6 \text{ alkyl})$ ,  $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_2-C_6 \text{ alkenyl})$ ,  $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_2-C_6 \text{ alkynyl})$  or  $C_3-C_7 \text{ cycloalkyl}$ , each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy,  $C_1-C_7$  alkoxy,  $C_3-C_7$  cycloalkoxy, oxo, and  $NR^4R^5$ , biphenyl optionally

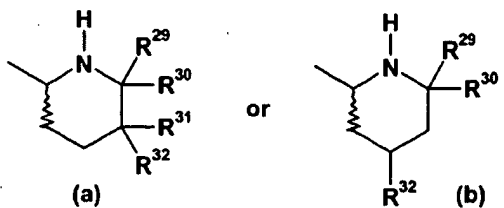


substituted with halo, hydrogen,

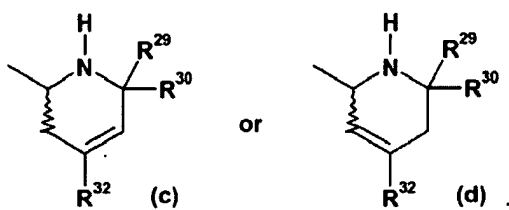
$R^2$  is  $C_1-C_3$  alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo,  $C_1-C_6$  alkoxy optionally substituted in the alkyl chain with  $C_3-C_7$  cycloalkyl, and  $C_1-C_6$  alkylthio optionally substituted in the alkyl chain with  $C_3-C_7$  cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo,  $C_1-C_6$  alkoxy optionally substituted in the alkyl chain with  $C_3-C_7$  cycloalkyl, and  $C_1-C_6$  alkylthio optionally substituted in the alkyl chain with  $C_3-C_7$  cycloalkyl;

$R^3$  is:

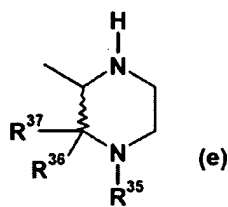
- i) a piperidin-2-yl moiety of formula:



- ii) a tetrahydropyridin-2-yl moiety of formula:



iii) a piperazin-2-yl moiety of formula:



iv) — homopiperidin-2-yl;

v) — 1,2,3,4-tetrahydroisoquinolin-3-yl optionally substituted with one or two substituents selected from halo, C<sub>1</sub>-C<sub>6</sub> alkyl, and C<sub>1</sub>-C<sub>6</sub> alkoxy;

vi) — 2-azabicyclo[2.2.2]oct-5-ene-3-yl;

vii) — 2-azabicyclo[2.2.1]hept-3-yl optionally substituted with C<sub>1</sub>-C<sub>10</sub> alkyl optionally substituted with C<sub>1</sub>-C<sub>4</sub> alkoxy; or

viii) — 2-azabicyclo[2.2.2]oct-3-yl optionally substituted with oxo, or optionally substituted with one or two substituents independently selected from hydroxy, fluoro, and C<sub>1</sub>-C<sub>6</sub> alkyl;

X is CH, N, or N<sup>+</sup>-O<sup>-</sup>;

Y is CR<sup>11</sup>, N, or N<sup>+</sup>-O<sup>-</sup>;

Q is CR<sup>12</sup>, N, or N<sup>+</sup>-O<sup>-</sup>;

R<sup>4</sup> is hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted up to three times with fluoro, or phenyl;

R<sup>5</sup> is hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted up to three times with fluoro, phenyl, -

C(O)(C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted up to three times with fluoro), or

-SO<sub>2</sub>(C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted up to three times with fluoro);

R<sup>6</sup> and R<sup>7</sup> are independently selected from the group consisting of methyl, ethyl, and propyl;

R<sup>8</sup> is hydrogen or C<sub>1</sub>-C<sub>6</sub> alkyl;

R<sup>9</sup> is C<sub>3</sub>-C<sub>5</sub> cycloalkyl, *sec*-butyl, or -CH<sub>2</sub>R<sup>13</sup>;

R<sup>10</sup> is -CF<sub>2</sub>R<sup>14</sup>, -OR<sup>15</sup>, -CH<sub>2</sub>C(O)CH<sub>3</sub>, -S(O)<sub>1-2</sub>R<sup>16</sup>, -NR<sup>17</sup>SO<sub>2</sub>R<sup>18</sup>, (C<sub>1</sub>-C<sub>3</sub> alkoxy)-carbonyl, phenyl optionally substituted with halo, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl, or tetrazol-5-yl optionally substituted with C<sub>1</sub>-C<sub>3</sub> alkyl;

$R^{11}$  is hydrogen, chloro, isobutyl,  $CH_2R^{19}$ ,  $CF_2R^{20}$ , 1,1,1-trifluoro-2-hydroxyeth-2-yl,  $C_2$ - $C_4$  alkenyl optionally substituted with one or two fluorine atoms,  $OR^{21}$ ,  $C(O)R^{22}$ , N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl, N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents selected from the group consisting of hydroxymethyl, methoxy, fluoro, and methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally substituted with methyl;

$R^{12}$  is hydrogen or fluoro;

$R^{13}$  is ethynyl or cyclopropyl;

$R^{14}$  is hydrogen or methyl;

$R^{15}$  is difluoromethyl or methanesulfonyl;

$R^{16}$  is  $C_1$ - $C_4$  alkyl,  $C_3$ - $C_6$  cycloalkyl, phenyl, or  $-NR^{25}R^{26}$ ;

$R^{17}$  is hydrogen,  $C_1$ - $C_3$  alkyl optionally substituted with up to 3 fluorine atoms, or  $C_3$ - $C_6$  cycloalkyl;

$R^{18}$  is  $C_1$ - $C_3$  alkyl or  $C_3$ - $C_6$  cycloalkyl;

$R^{19}$  is fluoro, hydroxy, or  $C_1$ - $C_3$  alkoxy;

$R^{20}$  is hydrogen, phenyl, or furyl;

$R^{21}$  is  $C_1$ - $C_3$  alkyl optionally substituted with one or two fluorine atoms;

$R^{22}$  is  $C_1$ - $C_3$  alkyl,  $C_3$ - $C_5$  cycloalkyl,  $C_2$ - $C_3$  alkenyl,  $C_1$ - $C_3$  alkoxy,  $NR^{23}R^{24}$ , pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-1-yl, phenyl, pyridinyl, or furyl;

$R^{23}$  is hydrogen or methyl;

$R^{24}$  is methyl, ethyl, or propyl;

$R^{25}$  is hydrogen or methyl;

$R^{26}$  is methyl; or

$R^{25}$  and  $R^{26}$  taken together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine ring;

$R^{29}$  is hydrogen or  $C_1$ - $C_6$  alkyl;

$R^{30}$  is hydrogen or  $C_1$ - $C_6$  alkyl;

$R^{29}$  and  $R^{30}$  taken together with the carbon to which they are attached form a  $C_3$ - $C_6$  cycloalkyl ring;

$R^{31}$  is hydrogen,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_6$  cycloalkyl, or phenyl optionally monosubstituted with  $C_1$ - $C_6$  alkyl;

$R^{32}$  is hydrogen,  $R^{33}$ , or  $-(CH_2)_{0-2}-OR^{33}$ ;

$R^{33}$  is  $C_1$ - $C_{10}$  alkyl optionally substituted with 1-6 fluorine atoms,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, or  $-(CH_2)_{0-3}-R^{34}$ ;

$R^{34}$  is  $C_3$ - $C_7$  cycloalkyl or phenyl each optionally substituted with one or two substituents independently selected from the group consisting of halo,  $C_1$ - $C_6$  alkyl,  $C_1$ - $C_6$  alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thienyl optionally substituted with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted with  $C_1$ - $C_4$  alkyl, or adamantyl;

$R^{35}$  is  $-(CH_2)_{0-6}-R^{34}$ ,  $-C(O)-(CH_2)_{0-6}-R^{34}$ ,  $-C(O)-(C_1-C_{10} \text{ alkyl})$ ,  $-C(O)-(C_1-C_4 \text{ alkoxy})$  optionally substituted with phenyl),  $C_1$ - $C_{10}$  alkyl optionally substituted with 1-6 fluorine atoms,  $C_2$ - $C_{10}$  alkenyl, or  $C_2$ - $C_{10}$  alkynyl;

$R^{36}$  and  $R^{37}$  are both hydrogen or, taken together with the carbon atom to which they are attached form a carbonyl group; or a pharmaceutically acceptable salt thereof; provided that: a) no more than one of X, Y, and Q may be N or  $N^+-O^-$ ; and b) when X is CH, Y is  $CR^{11}$ , and Q is  $CR^{12}$ , then one of  $R^{11}$  and  $R^{12}$  is other than hydrogen.

Claims 2-5 (Canceled)

6. (Original) A pharmaceutical formulation comprising a compound of Claim 1, in combination with a pharmaceutically acceptable carrier, diluent, or excipient.

Claims 7-8 (Canceled)

9. (Previously presented) A method for the inhibition of A- $\beta$  peptide comprising administering to a mammal in need of such treatment an effective amount of a compound of Claim 1.

10. (Canceled)